October 29, 2001

Mr. Jon Heinrich
Wisconsin Department of Natural Resources
101 S. Webster Street
Madison, WI 53703

Re: Comments - Proposed Mercury Rule, NR 446

Dear Mr. Heinrich:

Thank you for the opportunity to provide comments on the proposed Wisconsin Department of Natural Resources mercury emissions rule. WMC also incorporates here comments provided to the Natural Resources Board at its June 2001 meeting, its testimony at the October 1, 2 and 3 DNR public hearings, and comments provided to the Public Service Commission of Wisconsin on August 24, 2001.

As you know, WMC is a business trade organization with more than 4,600 members statewide. More than a quarter of Wisconsin's private sector employment is employed by WMC members. WMC is the largest organization representing industrial electric ratepayers in the State of Wisconsin.

DNR's proposed rule mandates a phased reduction of mercury from major utilities of 30 percent, 50 percent, and 90 percent over fifteen years. The rule requires offsets for new emissions equal to 150 percent of projected new emissions. The rule also caps major industrial sources, defined as emitting 10 pounds or more of mercury on an annual basis.

WMC opposes the rule as drafted due to four major concerns: 1) The rule's first two utility reduction phases will cost Wisconsin ratepayers over $1 billion directly, and indirectly threaten jobs and economic growth; 2) The rule jeopardizes Wisconsin's ability to meet its energy needs; 3) Major source caps inhibit economic growth and threaten economic expansion; and 4) The rule doesn't address the stated environmental problem.

WMC also has serious reservations over the process used by DNR in developing this rule proposal. Namely, DNR has failed to adequately present significant issues to the public during this comment period. This omission makes it difficult, at best, for meaningful comments on key issues such as available technology, environmental benefits, costs, and the impact on the state's energy policies.

I. DNR Should Put This Rulemaking on Hold Until Key Issues are Better Understood.

At the June 2001 Natural Resources Board meeting, DNR received authorization to proceed with hearings on this proposal. WMC and other interested parties repeatedly requested an opportunity to review and provide input on the draft rule and underlying analysis before the

rule was finalized for hearings. Normally, such input produces meaningful dialog that improves rule proposals and enhances the public's participation in the rulemaking process. Instead, interested parties were given this information only weeks before the Board's decision to proceed with public comments.

At that June Board meeting, Secretary Bazzell did announce the formation of two advisory committees to help further develop this draft rule – one to focus on technical issues, the other to address policy issues relating to the rule. While WMC appreciates Secretary Bazzell's efforts to set up these advisory committees, these deliberations should have preceded the public comment period. The substantial defects with DNR's proposal reflects the fact it was developed in such isolation, as DNR simply had inaccurate or insufficient information to produce a rule ripe for public comment.

For example, DNR's Technical Advisory Group (TAG) was charged "to assist the DNR and the Mercury Citizen Advisory Committee in the evaluation of technical issues relating to the establishment of a regulation to limit mercury emission in Wisconsin and ***to highlight technical issues for public information***." At its last meeting on October 19, TAG members outlined and set up workgroups to develop "issue sheets" on the following fundamental issues:

- The Environmental Benefits of a Wisconsin Mercury Rule
- Available Mercury Control Technology and Related Costs
- Baseline and Monitoring Issues
- Federal Developments

The official comment period on this proposal ended October 15.[1] It was not lost on most interested parties that the TAG had not even begun its deliberation on key issues until after the public comment period had ended. Certainly, the public did not get any benefits from their deliberations. Instead, the public was provided inaccurate cost information, little information on the rule's impact on Wisconsin's energy policies, an inadequate environmental assessment, and gross assumptions on available control technology

This defect in the process can be easily remedied. We expect the TAG deliberations, if meaningful, will take several more months. Then, the Citizen Advisory Committee will review the TAG analysis and provide comments and recommendations for Secretary Bazzell. Additional important information will become available in early 2002 when the results are expected from Wisconsin Electric's Pleasant Prairie research project on carbon sorbent technology.

DNR must provide the advisory committees sufficient time to address the technical and policy issues relating to a Wisconsin mercury rule. Part of this effort should include a thorough evaluation of the impact of various mercury reduction scenarios on Wisconsin mercury

[1] WMC appreciates the gesture by DNR to allow two additional weeks for interested parties to submit their final comments.

deposition and the relationship of such deposition to mercury levels in fish. Again, the results for Wisconsin Electric's Pleasant Prairie project must be fully evaluated.

During this period, this rulemaking effort should be put on hold and the record remain open. Given new information will be developed through this process, DNR should then go back out to hearing so the public can meaningfully participate, consistent with the spirit of Wisconsin's administrative law procedures. From our perspective, WMC needs this additional information to provide meaningful comments. Addressing these procedural issues, however, will not necessarily address other fundamental objections WMC has with this proposal.

II. The Proposed Rule could Severely Damage the State's Economy

A. Direct Impacts on Industrial Ratepayers will be Significant

Given our concerns about the economic implications of this proposal, WMC is working with renowned experts in environmental economic analysis of the utility industry to produce a cost study of the rule. Included in these comments is a preliminary draft of this report ("WMC Study").[2]

Some of the key conclusions from the study include:

- During the time period from 2007 to 2016, utilities will expend almost $1.1 billion to meet the proposed rule's 30 and 50 percent reduction targets;
- To achieve the 50 percent reduction target, all Wisconsin utilities would face removal costs of at least $110,000/pound, and one Wisconsin utility would face removal costs of $240,000/pound;
- Two Wisconsin utilities will be unable to meet the 50 percent reduction target in 2012;
- During the time period from 2007 to 2016, individual industrial customers could incur additional electricity cost of up to $517,000.

Although the proposed rule calls for a three-phased (30/50/90 percent) mandate on major utilities, we asked the authors of the study to focus

[2] While the study presented today is preliminary, the modeling for the 30/50 phases is sufficiently complete to present it for review.

only on the first two phases (30/50 percent reduction mandates) for the purpose of this preliminary study.[3]

At this time, WMC believes a cost analysis of the 90 percent mandate may be too speculative given the lack of available control strategies to reach that target.[4] In fact, as noted in the study, several utilities will be unable to meet even the 50 percent target. While initially we are reluctant to estimate the costs associated with a 90 percent mandate, WMC believes it is important the Natural Resources Board carefully assess those potential costs.[5]

We believe it is important to emphasize that the system used by the authors to calculate costs were conservative and intended to produce a least cost estimate. On this point, the authors note:

> In general, [the model] identifies the combination of control technologies that approximates the **least cost solution** for a given utility system based upon the application of a uniform set of control assumptions across the entire boiler population. (Study, pp. 3)
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> * * *
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> Those units with the lowest evaluated unit costs are assumed to deploy control technologies first. (Study, pp. 4)

Further, the cost data is derived from modeling of technology, primarily carbon injection, that has not been subject to a completed full-scale demonstration. The modeling makes assumptions the technology prescribed by the DNR fiscal estimate will achieve certain reductions even though it has not been fully tested. Further, the analysis focuses exclusively on mercury controls and does not optimize cost across a multi-emission plan. This assumption of available control technology is another reason to view the cost estimates as conservative, with actual costs being significantly higher if technology does not develop as the DNR envisions.

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[3] Although the targets analyzed were 30/50 percent, the actual reductions necessary to reach those targets would be substantially higher. For the 30 percent target, the actual reductions of mercury emissions necessary to attain the utilities' system caps would range between 36.9 and 58.8 percent. To hit the 50 percent target, the actual reductions would be between 56.5 and 70.0 percent.

[4] In fact, certain Natural Resources Board members have already requested DNR staff to eliminate what they believe is an unreasonable mandate.

[5] At least one utility has endeavored to estimate the costs to reach the 90 percent target. In its comments to the PSC in this docket, Wisconsin Electric Power Company states: "The estimated cost, in today's dollars, of the proposed rule package would add more than $1.4 to $3.3 billion. By comparison, Wisconsin Electric's current total revenue requirement for its electric utility operating in Wisconsin is approximately $1.5 billion." In fact, certain Natural Resources Board members have already requested DNR staff to eliminate what they believe is an unreasonable mandate.

B. DNR's Fiscal Estimates are Seriously Flawed

Even using these conservative estimates, the cost of this rule will be substantial, far exceeding the estimate DNR is providing the public. In its rule package, DNR states:

> The control costs assume that carbon impacts are minimized thereby avoiding any land filling cost for fly ash. The first phase costs are estimated at 0.02 cents per kilowatt-hour using activated carbon sorbent. For an average household consuming 1000 kilowatt-hour per month this results in an additional cost of $2 per year and annual utility cost of $8 million. The second phase results in a 50% mercury emission reduction with a cost of $4 per year and annual utility cost of $17 million. The final phase, a 90% mercury emission reduction, is estimated to cost $10 per year per household and annual utility cost of $35 million. (DNR Mercury Rule Cover Memorandum, pp. 9-10)[6]

As noted in the WMC Study, DNR cannot ignore the costs associated with the rule's effect of contaminating fly ash. The cost for land filling previously useable fly ash will be $200 per ton. The DNR must consider these cost as it reviews the implications of the rule. There are other flawed assumptions leading to DNR's inaccurate estimates.

Our study shows that beginning in 2007, Wisconsin electric utilities will incur an annualized cost of $88.5 million to meet the proposed rule's initial 30 percent reduction target. By 2012, their annualized compliance costs will increase by 45 percent to $127.9 million in order to achieve the proposed rule's 50 percent reduction target. Aside from being low by an order of magnitude, using "per household" costs is misleading and grossly understates the impact of the rule on the state's economy.

Industrial users must consider the costs of this proposal as a hidden tax for conducting business in Wisconsin. In fact, it amounts to one of the biggest tax increases in the history of the state. Because Wisconsin would have the first such rule in the nation, it is a tax not imposed anywhere else. This, in turn, makes the cost of doing business in Wisconsin higher than before, and with other considerations equal, higher than in other states.

Further, industrial electricity rates have been increasing steadily compared to the national average since the mid 1990's. WMC

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[6] These cost estimates are significantly lower than revised estimates that were developed in late August as part of the Technical Advisory Group. DNR has recalculated cost estimates, and they range from approximately 10-150% higher for the 30% reduction level, 15-125% higher for the 50% reduction level, and over 225% higher for the 90% reduction level.

believes, therefore, that the highly competitive nature of business causes this rule to be an economic disincentive for companies already in Wisconsin, and possibly more important, for companies considering expanding or locating here. Moreover, WMC believes the DNR should reconsider and republish more realistic cost estimates to provide the business community with a fair opportunity to assess and comment on the rule during the public hearing process.

C. The Indirect Costs Relating to Coal Utilization

The economic impacts of DNR's proposal go beyond the direct costs associated with substantially higher energy costs. For example, and as discussed below, the rule adversely impacts electric reliability by forcing utilities to burn natural gas instead of coal. The economic implications associated with the threat to our electric reliability are discussed later.

WMC has had the opportunity to review a study conducted by Adam Rose and Ram Ranjan from Pennsylvania State University entitled "The Economic Impact of Coal Utilization in Wisconsin." ("Penn State Study," attached) That study, while not wholly embraced at this time by WMC, nor reviewed by Wisconsin utilities proposing new coal plants, projects another serious economic hit we will see from the DNR rule.

As stated by the authors, the "purpose of this study is to project the extent of the likely impacts of coal utilization on the Wisconsin economy in the year 2010. This projection period covers both current coal-related economic benefits and those that may result from the construction of new coal-fired generating capacity." (Penn State Study, pp. 4)

The Penn State Study analyzed how coal-based electric generation affects production (output), household income, and employment in other sectors of the Wisconsin economy using four alternative scenarios. Notably, they found:

> Our results indicate that these "ripple effects" are sizeable, approaching $12 billion ($1999) in State economic output in one scenario. *The results imply that Wisconsin's government policies and private industry decisions affecting coal-based electric generation potentially can affect every major aspect of Wisconsin's economy.* (Penn State Study, pp. 4) (emphasis added)

Assigning equal weight to each of the four scenarios, the indicated average impacts of coal use in Wisconsin in 2010 are:

- $7.4 billion in economic output;
- $4.0 billion in annual household income, and
- 124,100 jobs.

The implications of DNR's rule on these positive economic impacts are underscored by the author's review of Wisconsin Electric's proposal to build three new 600 MW coal-fired generating units. Again, using an equal weighting of results for the four scenarios, the lost economic impacts if the WEPCO proposed coal plants are excluded from the model would be:

- $1.0 billion of additional state economic output;
- $551 million additional household income, and
- 17,100 Wisconsin jobs.

While Wisconsin Electric does not propose to eliminate these plants, the utilities will certainly retire older coal plants or otherwise switch fuels. According to the authors, "the linearity assumption of input-output modeling" allows one to assume that elimination or reduction of coal from the state's energy portfolio causes us to lose corresponding economic output and jobs.

The essence of the study is that changing the state's energy portfolio will have severe economic implications due to the ripple effect it would have running through the economy. We interpret the study to mean that cutting projected coal use by 50 percent would mean that Wisconsin would lose $3.7 billion in overall annual economic output, would lose $2.0 billion in annual household income, and would lose 62,050 jobs.[7]

WMC needs to more carefully assess the implications of the Penn State Study. Moreover, we believe it is imperative that the Natural Resources Board consider such impacts of the rule.

D. Reliability Threats are Major Inhibitors to Economic Growth

In addition to the direct costs shutdowns inflict, lack of reliable energy, discussed elsewhere in these comments, will force those looking to invest capital and create jobs to look to places other than Wisconsin.

The story of California is well known. This direct impact there is an electric rate increase of nearly 380 percent in 2000 over 1999 rates. According to the Bush Administration's National Energy Policy, the Silicon Valley Manufacturing Group recently estimated that its nearly 200 members lost over $100 million dollars because of one day of rolling blackouts in June 2000.

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[7] Several utilities have provided comments to the Wisconsin Public Service Commission in an official docket in August, 2001. WMC's review of these comments and our understanding of the impacts of this rule is that the conversion from coal to natural gas would be substantial, exceeding the 50 percent illustration used here.

The indirect effects, however, while difficult to measure, are potentially much greater. Also accruing to the Nation Energy Policy report, 43 percent of California small businesses surveyed in February 2001, said the power problem had dimmed their views about California as an attractive place for doing business. An energy climate in which companies are crossing their fingers and hoping the lights won't go out is not a climate conducive to business investment or consumer confidence. This rule potentially brings California's problems to Wisconsin.

III. The Rule Threatens Electric Reliability and the State Fuel Portfolio

A. Control Technology will not be Available

The WMC cost study should not be read as evidence the prescribed control technology will work, only that under the most conservative assumptions application of the technology will cost significantly more than predicted in the DNR fiscal estimate.

The availability of control technology is, in fact, a serious unanswered question. Carbon injection technology, that which the DNR fiscal estimate names as that most likely to be used to meet reduction mandates, is the current subject of significant national research sponsored jointly by the U.S. Department of Energy, U.S. Environmental Protection Agency (EPA), and the Electric Power Research Group. Wisconsin Energy Corporation is a partner in this research and the company's Pleasant Prairie plant is the single test site for carbon injection technology as applied to the predominantly western low sulfur coals burned by Wisconsin utilities.

Data from the study will not be available until 2002. While other technologies are the topic of discussion, none is on the market today. While positive results of the study will not necessarily be applicable to other Wisconsin utilities, the data is critical information and the rule should not proceed until results are known sometime in 2002.[8]

These technological uncertainties pose a serious threat to Wisconsin's ability to generate enough electricity for a functioning economy. Wisconsin is already in a tenuous electric reliability situation. This past summer, a short heat spell forced some utilities to shut off power to interruptible customers, closing some of Wisconsin's largest factories for as many as three consecutive days. Needless to say, this is a major drag on the economy of the state.

[8] Given the study is being conducted at Wisconsin Electric's Pleasant Prairie Power Plant, a plant significantly larger than the norm in Wisconsin, the technology may or may not be transferable to Wisconsin's other, smaller electric generating units.

B. The Rule may Require Early Retirement of Coal-Fired Generation and will Preclude New Coal-Fired Plants.

As noted by Governor McCallum in his 2001 energy policy, "we need to add at least 6,300MW of additional electric capacity by 2016". To develop this much new electric generation, we must encourage a diverse fuel portfolio, including gas, renewables, *and* coal. Again from the Governor's 2001 Energy Policy "Significant reductions in allowable mercury emissions could disrupt our ability to generate electricity from coal at reasonable prices."[9]

Even with continued development of mercury control technology, utilities will be driven to convert coal-fired power plants to gas-fired operations to meet the over-reaching rule mandates. This is a direct threat to existing and proposed electric generation, and will undoubtedly lead to higher cost.

Beyond the lack of available control technology, the rule directly undermines the state's efforts to address electric reliability through its ban on the construction of any new coal plants. The DNR rule bans construction of new coal-fired electrical plants unless the utility somehow finds offsets from other sources equal to 150 percent of the new plant's projected emissions. However, offsets will not be available for purchase because they will be needed to achieve the aggressive reduction mandates. This leaves nothing for new plants.[10]

The offsets and adoption of the rule, therefore, would force major changes in the state's current and future generation portfolio and fuel mix. Large scale retirement of existing coal plants and replacement with natural gas units would be required to allow construction of any new coal plants. The availability and cost of offsets also adds significant risk to investment decisions over new coal plants, at a time when the state generation capacity must be expanded to meet growth in electricity demand.

On this point, the Wisconsin Public Service Commission, the state agency with the statutory charge of maintaining a reliable electric system, concluded in public testimony October 3, 2001 "The unforeseen cost consequences of this rule, if implemented too rapidly, may see coal-fired generation significantly decline as a viable fuel source in our economy." The PSC further states "Our agency is deeply concerned that the proposed offset provision would have a chilling effect on future development of coal-fired generation in the state."

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[9] State of Wisconsin 2001 Energy Policy: Strategic Directions for Wisconsin's Energy and Economic Future. Wisconsin Department of Administration, Division of Energy. July 2001

[10] It should also be noted that the accompanying study does not calculate the opportunity costs associated with offsets, since it does not model for new generation.

IV. Major Stationary Source Caps and the Proposed Construction Ban will Impede Economic Development for Little Environmental Benefit

Beyond the "major utility" requirements noted above, DNR proposes to target "major stationary sources," which would include industrial, utility, and government facilities. DNR defines major stationary sources as any stationary source that emits 10 pounds or more in each of the baseline years (1998-2000). These sources are prohibited from exceeding the average annual emissions for the three-year baseline. Sources exceeding this cap must obtain certified reduction credits/offsets sufficient to "correct" the exceedence.

In addition, all sources would be subject to the construction/modification ban on any new mercury sources over 10 pounds per year. This ban takes affect January 1 of the 4th year after the effective date of the rule. The construction ban can be avoided if the emissions from the new or modified source are offset at a ratio of 1.5 to 1.0. That is, if a new/modified source proposes to emit 10 pounds, it must somehow find 15 pounds of reductions from other sources.

A. The Major Source Cap will Cap Economic Growth

WMC objects to both of these mandates that, when working together, would ban certain business expansion in Wisconsin. For example, an existing major stationary source will not be able to increase production given the cap on emissions and the likely inability to obtain necessary offsets. This scenario is particularly likely for those companies that are using coal-fired boilers that are operating at less than capacity during the baseline years.

Given the high demand and tenuous electricity supply in Wisconsin, a utility boiler is likely to be operating at 90 percent or greater of its capacity. However, given current economic circumstances, an industrial boiler, such as that of a paper mill, is more likely to be currently operating at 40 or 50 percent of its design capacity. The cap and lack of offsets will prohibit such companies from increasing their energy output to meet increased production targets in future years. Our concern is that these companies will find it easier to expand out of state than to convert to natural gas.[11]

Likewise, companies relying on coal as their primary fuel could not expand or locate in Wisconsin due to the construction ban and lack of needed offsets. Again, rather than relying on natural gas, they may find it more economically feasible to expand or locate in other states.

[11] Utilities subject to the cap would face similar challenges in that the caps would generally preclude using coal at levels above the baseline years. The caps will increase their costs by eliminating economic considerations in their dispatch decisions.

B. The 10-Pound Major Source Threshold is Arbitrary, and Related Emissions are Inconsequential

WMC also questions the environmental benefits of regulating boilers with emission levels as low as 10 pounds annually. DNR has provided little justification for the 10-pound threshold, nor is there any rationale provided to justify why the threshold is calculated by cumulating emissions from all sources located at a plant or facility.

Regulating facilities emitting as little as 10 pounds per year produces little, if any, environmental benefits. Assuming an unregulated 10-pound facility's emissions would grow 10 percent in any given year, DNR "captures" all of one pound through its cap. Assuming that 10 percent of those emissions end up in Wisconsin, DNR's regulation of a 10-pound source prevents little more than an ounce of mercury from ending up in the state's environment.

Yet, in addition to limiting their ability to grow, these sources would face substantial regulatory costs with the regulatory scheme proposed, including burdensome baseline calculations and other administrative burdens. Of course, if an industrial facility chooses not to restrict production or if a utility must increase output to serve its customers, they face expensive control or fuel switching costs. There is no justification for imposing these costs on such small sources.

Targeting such small sources makes little sense in light of natural and out-of-state sources of mercury. For example, the National Center for Atmospheric Research (NCAR) released the results of a study that estimates wildfires contribute as much as 1.6 million pounds of mercury annually. Substantially increasing the 10-pound threshold would not harm the environment. DNR has not provided any evidence to the contrary.

WMC also objects to aggregating all emissions at a facility. For example, a 10-pound facility may have several boilers that together breach the 10-pound threshold. In effect, such a facility with three boilers has a 3.3-pound cap on each boiler. Again, DNR offers no explanation as to why this makes sense. In fact, the petition for this rulemaking by environmental groups argued for a 10-pound per boiler threshold. Whatever threshold level is chosen, WMC requests that DNR consider using a unit versus a facility threshold. This is consistent with other air quality program, as well as the petition.

C. DNR Attempt to Regulate Sources Subject to Federal Hazardous Emission Standards is Inconsistent with State Law

Sources covered by federal hazardous air emission standards (e.g., municipal waste incinerator MACT) must be exempt from the state mercury rule. Wisconsin law, §285.27(2)(a), Stats., provides the following:

> "If an emission standard for a hazardous air contaminant is promulgated under section 112 of the federal clean air act, the department shall promulgate by rule a similar standard but this standard may not be more restrictive in terms of emission limitations than the federal standard . . . "

This provision is not ambiguous. If a source is subject to a federal hazardous air emissions standard, DNR mercury rules cannot be more stringent. We are aware of several sources that would be subject to the proposed rule that have federal standards for mercury emissions. Regulating these sources violates the letter and intent of this statutory directive. Apparently, DNR believes that emission caps are not emission limitations subject to this restriction. If that interpretation were to prevail, the above statutory language is rendered meaningless.

V. State-only Rule will not address Environmental and Health Goals

A. Despite the Cost, the Rule will not impact Fish Advisories.

The DNR offers unhealthy mercury levels in fish, as evidenced by new statewide fish advisories for mercury, as the environmental rationale for the rule.[12] However, controlling Wisconsin mercury emissions cannot alone address DNR fish advisories.

Available science shows that mercury deposition from outside Wisconsin ranges upwards to 90 percent, traveling hundreds or thousands of miles in the atmosphere before being deposited in rivers or lakes.[13] This, combined with the fact that half of that deposition comes from natural sources, must lead one to question how much of an impact reductions in Wisconsin will ultimately have.
Even the EPA, in its Utility Study, supports our understanding that Wisconsin sources contribute little to the State's mercury "problem."[14]

For example, EPA concluded only one-third of U.S. anthropogenic emissions are deposited within the lower 48 States. Moreover,

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[12] Despite the potential severe economic and regulatory implications of DNR's actions with respect to setting advisories, these advisories are not promulgated by DNR – there is no opportunity for formal notice and comment that is afforded other DNR actions. WMC strongly objects the setting of such advisories and recommends the DNR revise its policy of setting unpromulgated advisories.

[13] Assessment of Mercury Emissions, Transport, Fate, and Cycling for the Continental United States: Model Description and Evaluation. EPRI. December 2000. Report 1000522.

[14] USEPA *Mercury Study Report to Congress* (Dec. 1997), Findings incorporated in EPA's *Utility Report to Congress* (Feb. 1998).

according to the EPA, most (about 75%) of utility-emitted mercury will deposit to ground level beyond 50 km of its source. As a result, EPA concluded: "Given the current scientific understanding of the environmental fate and transport of [mercury], it is not possible to quantify how much of the methylmercury in fish consumed by the U.S. population is contributed by U.S. emissions relative to other sources of mercury (such as natural sources and re-emissions form the global pool). As a result, it cannot be assumed that a change in total mercury emissions will be linearly related to any resulting change in methylmercury in fish, nor over what time period these changes would occur." (Executive Summary, pp. 15)

EPA's conclusions relating to transport are particularly relevant to Wisconsin, which is attempting to address mercury air deposition within its boundaries through regulation of only in-state sources. This is potentially a meaningless exercise. DNR's prior positions relating to TMDLs is consistent with that premise. DNR advised the Natural Resources Board that "Because the transport of air toxic substances is transboundary in nature and not entirely known, it is impossible to assign state-only responsibility." (April 1998 "Greensheet" on impaired waters.)

Like ozone, air deposition of mercury into Wisconsin waterbodies is a regional problem requiring a regional solution. So like our position on ozone, WMC's position on mercury air regulation is that Wisconsin mandates should not be required until EPA addresses transport and related issues.

Clearly, there is little reason to come to a different policy conclusion here. The underlying assumption by DNR that having Wisconsin lead on this matter is somehow cost-effective is flawed. As a general policy, Wisconsin sources should be regulated by Wisconsin to the extent such regulation improves a Wisconsin problem. Otherwise, we simply expend our limited resources for no in-state benefit.

The State of Minnesota has reached a similar conclusion. In its July 2001 *Interim MPCA Mercury Policy* the Minnesota Pollution Control Agency concludes that only 10 percent of mercury deposition in Minnesota is derived from in state sources, which leads to the conclusion that "a 50% reduction in air emissions within Minnesota alone would result only in a 5% reduction in deposition."[15]

Similar conclusions must be reached for Wisconsin. It is clear that without a comprehensive national or international program, limits imposed in Wisconsin will have little impact on Wisconsin waters. In fact, WMC would argue that even if every industrial boiler in the state were to be taken off-line indefinitely, this rule still would not result in the removal of a single lake from the consumption advisory list.

[15] Interim MPCA Mercury Policy: Minnesota Pollution Control Agency. July, 2001

One would think that DNR would have addressed in its environmental assessment (EA) the above, what we believe to be compelling arguments on how this rule will do little if anything to address the stated problem. Instead, the thrust of that document is simply that lower mercury emissions are good.

WMC incorporates here Wisconsin Electric's detailed critique of the EA contained in their comments on this rule proposal. Key points noted include the following:

- The EA completely fails to substantiate DNR's assertion that this rule will reduce the number of water bodies with fish consumption advisories.
- DNR's assertion in its no action alternative that all of the mercury emitted by sources subject to this rule will accumulate in Wisconsin's environment is completely out of synch with well-established science.
- The cursory treatment of a few studies to support this rule is inadequate; DNR is well aware of additional studies that contradict its positions.
- Using conservative assumptions, 100% control on the state's largest power plant may reduce mercury levels in area fish by less than 0.5%.
- DNR fails to note its own findings that mercury deposition, as well as mercury levels in water and fish from an intensely studied lake in northern Wisconsin, has declined over the past decade.

B. The State rule will likely be Inconsistent with Pending Federal Rules

The United States Environmental Protection Agency (EPA) is in the process of developing federal rules on mercury. The EPA's December 2000 Notice of Regulatory Finding on mercury sets a deadline of 2003 to develop its rule, and EPA is in fact under court order to do so by 2004.[16]

WMC strongly disagrees with the assertion that proceeding ahead of a pending federal program could somehow help Wisconsin. Inconsistencies in state and federal programs on such issues invariably arise, resulting in lack of federal recognition of progress made within the state. For example, EPA states in its Regulatory Finding it will develop a MACT (Maximum Available Control Technology) standard, which would mandate application of specific control technologies for mercury. Wisconsin's proposed rule does not

[16] Regulatory Finding on the Emissions of Hazardous Air Pollutants From Electric Utility Steam Generating Units. U.S. Environmental Protection Agency. December 20, 2000.

mandate technology, but rather reduction levels and a cap and trade program. These two very different approaches would appear to raise significant inconsistency questions.

Given the national and international nature of the issue, and given the energy issues raised by WMC and other industry groups, state action prior to EPA rule development will not gain any discernable environmental or economic advantage. This rule imposes substantial costs with virtually no environmental benefits.

VI. Other Issues

WMC questions the reliance on variance provisions to remedy the technical and energy policy deficiencies of the rule. It would be irresponsible to make decisions involving substantial investments, for example, in coal-fired generation, assuming a variance down the road will be allowed. While variance provisions are needed, there ability to address the defects with this proposal is grossly overstated.

WMC also has concerns about other aspects of the rule, including baseline calculations, restrictions on use of product reduction projects for offsets, compliance alternatives, annual reports and other administrative burdens, and permitting. But as noted earlier, additional information on these and other issues is being developed through the advisory committee process. WMC trusts that DNR will allow interested parties to further respond to such issues at a later point after this information becomes available.

VII. Conclusion and Recommendations

WMC believes this rule will have a decidedly negative impact on the reliability, fuel mix and cost of the state's existing and planned generation portfolio. Because the rule precludes new coal generation and could force early retirement of existing generation, Wisconsin will need to become more dependant upon other fuels. In addition to changing the fuel portfolio, given current infrastructure issues with gas and renewable sources such as wind, the rule also puts into question the ability to meet energy needs.

Even if mercury control technology develops, direct costs for the first two scheduled utility reductions will exceed $1 billion. The third phase is unattainable with existing technology, and would certainly force a major shift in the state's generation portfolio to natural gas, resulting in greatly increased electricity costs to customers.

The rule also arbitrarily limits growth of many major industrial facilities, facilities with relatively small emission levels. Many of these facilities are the largest employers in their respective areas, but this rule makes it easier for those companies to expand in other states than to grow in Wisconsin.

Further, despite enormous costs, the rule will not address DNR's environmental objective. Because of atmospheric transport, only national and international policies will address the issue. The EPA will unveil its mercury proposal in 2003, which should lead policymakers to question the prudence of moving forward with this rule.

The Natural Resources Board adopted a resolution on December 6, 2001, directing the DNR staff to promulgate rules that protect public health and the environment, but are cost-effective, reasonable, and do not threaten electric reliability. The proposed rule meets none of these criteria.

Therefore, WMC supports the voluntary program option in the rule package sent to public hearing. WMC recommends such a program be based on the program run by the State of Minnesota and the Minnesota Pollution Control Agency (MPCA). The MPCA has entered 14 voluntary mercury reduction agreements with companies of various sizes and sectors of the economy. These agreements include such provisions as replacement plans for mercury-bearing equipment and devices; changes in processing methods; equipment inventories and labeling; and education programs for employees, customers and communities. WMC believes there are many Wisconsin companies willing to enter into such agreements, and that they will result in measurable reductions in mercury released into the environment.

The combination of court-ordered federal regulations in the pipeline and a problem we cannot fix on our own requires a measured policy approach. Such an approach would take advantage of what we know we can do voluntarily without threatening electric reliability or increasing electric rate by billions of dollars. In only a few short years the national picture will be significantly clearer. Developing a state mandate that cannot be met by technology, that threatens the direction of state energy policy over the objection of the Public Service Commission, and does not solve the stated problem, is not leadership. However, a voluntary approach does position Wisconsin as a leader, a state that is making real reductions and working to address the issue where it can make a difference.

Again, thank you for the opportunity to provide comment.

Sincerely,

Jeffrey T. Schoepke, Director
Environmental Policy